SBR No. 37/19-20
DATED 9-9-19

Original/Duplicate/Triplicate

CONTRACT CERTIFICATE

(For Other Works)

EE/ELE/Y/BR No. 37/19-20

Dt. 9-9-19

No.1st & Final Bill

Date.....2019

Division: **Electricals (Yelahanka)** Sub-Division: **Electricals**

Bill Received No. Dated Divisional Cash Book Voucher No..... Dated.....

Sub Divisional **Job Code :-011-19-000083**

Schedule Docket No. Head of Account : P – 3290 14Th Finance D.R.No.

Name of Work :- Providing Street Lights and Maintenance in ward no 11 Kuvempunagar

.Name of Contractor and Full Address:- Sri.S.SOMASHEKAR #90,New No,441/15,Allalsandra GKVK Layout,

Reference to Agreement No:EE(Project)Ynk Zone/WO/000059/ 2018-19 Date:-06/03/2019

Certified that the measurements were taken by me on 27/8/19 and recorded of Pages 256 to 416. of measurement Book No. 2565/2018-19 and that the work is satisfactorily executed.

Somasekhar
Contractor

T.N. Balakrishna
Officer-in-charge of work

Certified that the measurement were taken by me on 27/8/19 and found correct. The work is satisfactorily executed.

Certified that the quantities of materials shown in column 3 of Account have been actually brought to site of the work and the contractor has not previously received any advance on this security. These materials are of and imperishable nature and are all required for immediate use on the work in connection with items for finished work have been agreed upon. A normal agreement signed and executed by the contractor is recorded in the office.

Assistant Executive Engineer (E)

II Memorandum of Payment

		BBMP, Bangalore
1)	Total value of work done or supplies made as per account within	Bill= 2590776=00
2)	Deduct amount to be held in reserve being .....percent Rs.....	
3)	" Balance	
4)	Deduct Payment:	
	a) Amount of previous payment as in the Office Cash Book Voucher No.....Dated.....S.D. No..... adjusted towards cash advance recovery of	Amount
	b) Payments Now made { cost store or other material supplied. recovery of amount creditable to this/other work Amount paid on this bill Cheque / Cash.	
5)	Balance being unpaid value of work done held in reserve.	
6)	Deduct cash advance made on the Office cash Book Voucher No..... dated.....less adjustments.	
7)	Net amount due to or from Contractor unadjustments items.	
8)	Advance to Contractor for materials brought to site (as detailed) within.	
9)	Value of Government materials supplied.	
		Total amount adjusted -

IT 1% 25908=00
WWC 1% 25908=00
CBF 0.1% 2591=00
Cost 1% 23132=00
Cost 1% 23132=00
deductions= 100671=00
Cheque= 2490105=00

Somasekhar
Contractor's Signature

Received Rs..... (in words).....

.....

by cash and by adjustment of Payment as per memorandum

(in final settlement of all demands)

(For use in the Office)

Witness
1.
2.

Dated Somasekhar Signature of Contractor

Paid by me by Cheque No.....Dated.....

Cash Rs.....

Dated.....Initials of Officer making payme

Stamp

ಲೆಕ್ಕಶೀರ್ಷಿಕೆ P3290.14th Finance

ರೂ. 2590776=00 ಮಾಡಿ ಸ್ವೀಕರಿಸಿದೆ

2490105=00 ಪಾವತಿಗಾಗಿ

ರೂ. 100671=00 ಕಡಿತಮಾಡಿ ಹಾಕಿದೆ

ಸಹಾಯಕ ಕಾರ್ಯನಿರ್ವಾಹಕ ಅಭಿಯಂತರರು (ವಿ)

Sl. No		Unit
	Name Of Work:- Providing Street Lights and Maintenance in ward no 11 Kuvempunagar	
1	Supply and erection of .....Mtr RCC Pole including earth work etc,. complete as per the standard technical specification of BESCOM 8Mtr 145Kg WL	
2	LED Street light.Supply of LED Streetlight with pressure die cast aluminum housing body with optimal heat sink for better thermal dissipation. Diffuser with Injection moulded & is made of polycarbonate material with high transmission index, delivering superior light output. Rated life Burning Hrs 50000 hr @ Lumen Maintenance of 70%. CCT > 5500K, IP 66 optical and electrical compartment & impact resistance of complete luminare > IK08. Power Factor >0.9 with mains Current should not be greater than 0.1A to 0.7A & Surge Protection- Min 4KV along with Over voltage/Overload, short circuit/ miswiring protection. Compatible for pole mounting with outer dia of 40mm to 50mm. Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Over load & Short circuit protection ensures reliable operation in spite of problem in output side. Compliance to IS 10322/IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with. minimized minimal tools. LED Light fixture with .....W System Power consumption. LED Efficiency>130lm/w at 1W & FixtureEfficiency >80lm/w with nominal CRI >75. Luminaire manufacturer should have in-house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008 . Housing with supplier word mark /name shall be Engraved / Embossing on the die cast housing/ Body part. Warranty of 5 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED source manufacture. Suitable for B1/B2 Roads as per IS 1944 Part I & Part II.LED Streetlight .LED Streetlight 24watts	Each
3	65watts	Each
4	Supplying and Fixing of.....mm dia class A GI pipe bracket up to 2 mtrs long bent at suitable angle and fixing to this bracket 1x40/2x40 watts fluorescent tube street light fitting of all capacities to GI or CI or rail or RCC pole / wall using suitable clamps, bolts, and nuts and wiring using suitable capacity wires. Using 32mm dia G.I.pipe	Each
5	Wiring for lighting/power circuit using one of PVC insulated 1100v grade stranded **Aluminium** unsheathed wire single core/multi core cable in open or consealed system of wiring. a)4 sqmm.	Each
6	Supplying of 1.1kv grade Aerial Bunched cable stranded & compacted Aluminium Phase conductor and Stranded Messenger conductor with all aluminium alloy, Phase conductor is insulated with XLPE compound insulated Messenger with specified IS - 14255:1995 & confirming to GTP of group A. 2 X 25 + 1 X 25 SQ.MM	Per Mtr
7	Stringing of 1.1kv LT Arial Bunched Cable, BESCOM SR	Per Mtr
8	Supply and Installation / Fixing / Provision of Pole box with HRC Fuse / MCB provision and suitable connector / terminal for 3 Ph / 1 Ph connections with Loop-In & Loop-Out terminals for 10 Sqmm / 25 Sqmm 3.5 C Al/Ar / Cu/Ar Cable and branch out 2.5 Sqmm 2 core Al/Cu PVC Insulated cable, enclosed in a Thermoplastic, Polystyrene enclosure, which should be shock proof, safe, IP65(Weather Proof), rust proof, dust proof, water proof having Internally Embedded Gasket with provision for cable entry through IP65 Thermoplastic, polyamide glands and/or grommets.200mmx200mmx98mm	Nos
9	Supplying and fixing Moulded Case Circuit Breaker (MCCB) over the existing wood/panel board using necessary screws, bolts, nuts and wiring complete. Protection of Overload and Short circuit with thermal Magnetic/Micro processor release and Earth Fault as per IS-13947. (Icu = Ics) THREE POLE 100Amps25kA.	Nos
10	Open Conduit Systeme: Supplying heavy gauge PVC conditpipe,,,,,,,,,, dia confirming to IS 2509 with suitable size bends,junction boxes, adhesibve paste etc., and fixing using inverted wood plugs in case of RCC ceiling and RCC wall stone structure or rawl plug incase of brick walls and cement plastering damaged portion using heavy gauge saddles at an interval of 700mm using NF screws. c)25mm dia 2mm thick	Mtrs
11	Supplying and fixing angle iron frame work fabricated out of M.S. angle iron.. And M.S. flat... with bolts, washers etc., and painted with 2 coats of red oxide and then two coats of approved paint. A)40x40x6mm.	Mtrs

Previous Measurement		Present Measurement			Total Upto Date		Remarks
Qty	Cost	Qty	Rate	Amount	Qty	Cost	
		15	6047.00	90705.00	15	90705.00	
		25	7000.00	175000.00	25	175000.00	
		80	19500.00	1560000.00	80	1560000.00	
		103	893.00	91979.00	103	91979.00	
		297	7.50	2227.50	297	2227.50	
		596	143.00	85228.00	596	85228.00	
		596	10.30	6138.80	596	6138.80	
		7	2178.00	15246.00	7	15246.00	
		7	4044.00	28308.00	7	28308.00	
		36	70.00	2520.00	36	2520.00	
		10	263.00	2630.00	10	2630.00	

12	Supplying and stringing of ACSR Conductor (6/2.59mm Al +1/2.59mm Steel).	Mtrs
13	Supplying and Fixing .....including all Hardware's etc. complete as per the standard technical specification of BESCOM 1.1 KV Pin Insulator	Nos
14	No. 8 Strain Insulator	Nos
15	Supply and fixing of .....cross arm including all Hardware's complete as per the standard technical specification of BESCOM. 2 Pin 45x45x5mm -510mm	Nos
16	Fixing halogen/metal halide / SVL / IL / LED floodlight fitting over existing pole / wall ceiling including clamps, bolts, nuts and wiring using suitable capacity wires.	Nos
17	Supplay and erection of Single phase Thyristor based smart street light control system consisting of following aquipments 1. Precise turn ON & OFF of street lights on pre programmed data 2. 2 x 16 character LCD display unit to display date, status ON Or OFF , turn ON & OFF time, 3. Keypad to set/edit ON & OFF time as per the end user 4. Microcontroller with Real Time Clock and associated hardware 5. 1 No, SCR 162 amps thyristor module for load switching mounted on an extruded alluminium heat sink 6. Thyristor Driver Card: Driver control circuit to switch ON & OFF the Thyristor module 7. Firmware: Firmware to control the hardware and display the required data 8. Power Supply: AC to DC conversion circuit required for the electronic circuitry and driver control card 9. Enclosure is made out of 18 swg CRCA ms sheet of size H480xW310XD200mm with luvers for Heat dissipation IP65 weather proof metal enclosure 10. Wiring & other components like wiring, connectors ,insulators, Alluminium Bus bar and 2 nos of 125 amps single pole MCB for main power Supply control and Manual On & off operation & etc complete.	Set
18	Supplying of LT UG cable having aluminium conductor PVC insulated, sheathed, galvanished, steel wire/steel tap armoured cable with PVC outer sheating 1.1 KV class.I. Class 'A' PVC Cable. 4 core 16 sqmm	Per Mtr
19	Labour charges for laying of 1.1 KV class UG cable when supplied agency in existing trench GI pipe / stoneware pipe / on wall /on pole as required. I. In existing trench/duct. 6 sqmm to 16 sqmm	Per Mtr
20	Digging of trench of 0.6 m deep x 0.50 mtr wide refilling the trench to the required ground level and consolidating etc.,complete. (As perCivil SR KSRB I-2, P-7).a) In soil (ordinary)	Per Mtr
21	Supply and fixing of 4pole power contactor with NO/NC contacts on existing wood/panel board using necessary bolts, nuts, washers and wiring etc., complete with AC-3 Rating and as per IS-13947.100-125Amps	Each
22	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898. 40-63Amps TPN	Each
23	Supplying and fixing of Twin Dial electro mechanical timer (without contactor) using necessary bolts, nuts and washers etc.. Group A, PWD SR 2007-08,	Each
24	Fabricating supplying and mounting MS box made out... SWG suitable lfor floor/wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size cdlamps with mecessary cable entry pipe with gland and box should be finished with 2 cdoats of red oxide primer paint and finally finished with approved colour enameled metal pain etc., complete. b)16 swg	Nos
	Total Rs	

Certificate: 1. Certefied that the Above Work has been carreid out satisfactorily

Assistant Executive Engineer (Ele)
BBMP, Bangalore

		1993	30.00	59790.00	1993	59790.00	
		40	44.00	1760.00	40	1760.00	
		40	14.00	560.00	40	560.00	
		48	306.00	14688.00	48	14688.00	
		39	176.00	6864.00	39	6864.00	
		9	35000.00	315000.00	9	315000.00	
		496	140.40	69638.40	496	69638.40	
		496	10.80	5356.80	496	5356.80	
		423	78.00	32994.00	423	32994.00	
		1	9915.00	9915.00	1	9915.00	
		1	1936.00	1936.00	1	1936.00	
		1	4200.00	4200.00	1	4200.00	
		24520	0.33	8091.60	24520	8091.60	
				2590776.10		**2590776.10**	